

REMARKS

Claims 1-12 remain pending in the application and stand rejected. Applicants respectfully request reconsideration in view of the remarks set forth below.

Claims Rejected Under 35 U.S.C. §103

Claims 1-12 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,160,696 to Bailey et al. in view of U.S. Patent No. 6,683,418 to Shoji et al. As an initial matter, Applicants note that the Detailed Action indicates that the claims are rejected based on the combination of Bailey '696 with U.S. Patent No. 7,528,587 to Wu et al. The Examiner's arguments, however, refer only to the combination of Bailey '696 with Shoji '418. Accordingly, Applicants presume that reference to Wu '587 on page 2 of the Office Action was a typographical error and have addressed the rejections based on Bailey '696 and Shoji '418. If this presumption is incorrect, Applicants respectfully request that the Examiner contact the undersigned attorney to resolve this issue.

Claim 1 is the only independent claim of this rejected group. Applicants respectfully traverse the rejection of claim 1 because Bailey '696 fails to teach or suggest each and every element recited in claim 1, and Shoji '418 fails to cure these deficiencies. Specifically, Bailey '696 fails to disclose an electronic assembly for switching power having the structure set forth in claim 1, including:

two contact layers originating from one each of the power supply buses and covering the capacitor arrangement at least partially, with the contact layers comprising free end

portions which mutually project one another towards the respective other one of the power supply buses, with

the two contact layers having a freely accessible contact area each which is adapted for contact making with correspondingly configured power terminals.

Rather, Bailey '696 is directed to a modular bus bar and switch assembly that facilitates removal and replacement of a single IGBT/heat sink assembly from a power inverter for repair. With respect to FIG. 12, referred to by the Examiner, Bailey '696 shows an exploded view of a modular bus bar and switch assembly including bipolar transistors 112, 512 connected to offset extension bus bars 132, 532 to facilitate easy removal of the bipolar transistors. Bailey '696 indicates that the bus bar area is minimized by using a laminated interconnecting bus bar 130 connected between the offset extension bus bars 132, 532. (Bailey '696 at col. 5, lines 32-45.) Laminated interconnecting bus bar 130 is made up of a negative DC bus 423, a positive DC bus 421, and an AC line 422, as depicted in FIG. 12. Connection bushings 452, 454, 456, 458, and 461 extend between and connect the conducting portions 421, 422, 423 of the laminated interconnecting bus bar 130. (Bailey '696 at col. 5, lines 53-63.)

Accordingly, interconnecting bus bar 130 of Bailey '696 does not represent "two contact layers originating from one each of the power supply buses and covering the capacitor arrangement at least partially, with the contact layers comprising free end portions which mutually project one another toward the respective other one of the power supply buses," as recited in claim 1. In fact, there is no capacitor arrangement depicted in FIG. 12 of Bailey '696 at all; the structure indicated by reference numeral 130 is a laminated interconnecting bus bar made up of several bus plates 421, 422, 423

connected by bushings 452, 454, 456, 458, 461 disposed between the plates, as discussed above. Moreover, FIG. 12 does not depict two contact layers, each one originating from one of the power supply buses and having a free end that projects toward the other power supply bus.

The Examiner also alleges that emitter conductor 712 and collector conductor 714 shown in FIG. 13 of Bailey '696 correspond to "two contact layers having a freely accessible contact area which is adapted for contact making with correspondingly configured power terminals," recited in claim 1. Applicants note, however, that the emitter conductor 712 and collector conductor 714 are disclosed in Bailey '696 as being portions of a laminated offset extension bus in an alternative embodiment. Emitter conductor 712 and collector conductor 714 are therefore not the same conductor portions of the laminated interconnecting bus bar 130 shown and described with respect to FIG. 12. Accordingly, Bailey '696 also fails to disclose that the contact layers alleged by the Examiner (positive DC bus 421 and negative DC bus 423) have freely accessible contact areas adapted for contact with correspondingly configured power terminals, as set forth in claim 1.

Shoji '418 is directed to an inverter type illumination lighting device and is cited only for the disclosure of MOSFETs with free-wheeling diodes. Shoji '418 fails to cure the deficiencies of Bailey '696 discussed above. Therefore, even if Bailey '696 were combined with Shoji '418, the combination would not result in the claimed invention. For at least these reasons, Applicants respectfully request that the rejection of claim 1 be withdrawn.

Claims 2-11 each depend from independent claim 1. Claim 12 is directed to a power output stage of a driving means for a multiphase electrical machine including at least one electronic assembly in accordance with claim 1 for each phase. Claims 2-12 are therefore in condition for allowance for at least the reasons discussed above with respect to claim 1.

Applicants further traverse the rejection of claim 5 because Bailey '696 fails to teach or suggest "semiconductor switches which are arranged between the two power supply buses." (Emphasis added.) Rather, as discussed above, Bailey '696 is directed to a modular bus bar and switch assembly wherein bipolar transistors 112, 512 are not connected between bus bars 132, 532, but are positioned outwardly from a location between the bus bars 132, 532 to facilitate easy removal and replacement of the bipolar transistors 112, 512. Moreover, modifying Bailey '696 to place bipolar transistors 112, 512 between the bus bars 132, 532 would make the structure unfit for its intended purpose.

Applicants further traverse the rejection of claim 9 because Bailey '696 fails to disclose at least "respective second semiconductor switches being arranged with their source terminal a common second metallic conductor rail which forms the output" and "each second semiconductor switch being connected with its drain terminal to a common third metallic conductor rail which is to be connected with the low voltage potential," as recited in claim 9. In this regard, the circuit diagram in FIG. 3 of Bailey '696 only depicts a common first (positive) bus and a common second (negative) bus. FIG. 3 does not show the source terminal of the second semiconductor switches

(alleged by the Examiner to correspond to the location of AC1, AC2, & AC3 in FIG. 3) to be connected to a common metallic conductor rail, as set forth in claim 9. For at least the reasons discussed above, Applicants respectfully request that the rejections of claims 2-12 also be withdrawn.

Conclusion

In view of the remarks set forth herein, Applicants believe this case is in condition for allowance and respectfully request allowance of the pending claims. If the Examiner believes any issue requires further discussion, the Examiner is respectfully asked to telephone the undersigned attorney so that the matter may be promptly resolved. The Examiner's prompt attention to this matter is appreciated.

Applicants do not believe that any fee is due in connection with this submission. However, if any fees are necessary to complete this communication, the Commissioner may consider this to be a request for such and charge any necessary fees to Deposit Account No. 23-3000.

Respectfully submitted,

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